

STATEMENT OF DISPUTED FACTS

1. The Boarhead Farms Superfund Site (the “Site”) is located in Bridgeton Township, Pennsylvania on Lonely Cottage Road in Upper Black Eddy.
2. The Site is a “facility” as that term is defined in 42 U.S.C. § 9601(9).
3. The Site is a “site” as defined in Section 103 of the HSCA, 35 P.S. § 6020.103.
4. “Hazardous substances” as defined in Section 101(14) of CERCLA, 42 U.S.C. § 9601(14), were disposed of, placed on, or otherwise became located at the Site.
5. There have been “releases” as that term is defined in Section 101(22) of CERCLA 42 U.S.C. § 9601(22), or threatened releases of hazardous substances into the environment at or from the Site.
6. There have been “releases” or “substantial threats of releases” of “hazardous substances” and “contaminants” into the environment at or from the Site, as those terms are defined in Sections 101(22), 103, and 501(a) of HSCA, 35 P.S. §§ 6020.101(22), 6020.103 and 6020.501(a).
7. The release or releases have caused the incurrence of “response” costs at the Site, as that term is defined in 42 U.S.C. § 9601(25).
8. Advanced Environmental Technology Corp., Handy & Harman Tube Company, Carpenter Technology Corporation, Ashland, Inc., Agere Systems, Inc. (“Agere”), Cytec Industries Inc. (“Cytec”), Ford Motor Company (“Ford”), SPS Technologies, LLC

(“SPS”) and TI Group Automotive Systems L.L.C. (“TI”) are all persons as that term is defined under both 42 U.S.C. § 9601 and 35 P.S. § 6020.103.

9. Manfred T. DeRewal (“DeRewal”) incorporated Boarhead Corporation on or about September 2, 1969.

10. The Site was conveyed to Boarhead Corporation by Deed dated October 16, 1969. Boarhead Corporation continues to own the Site today.

11. On or about December 29, 1969 DeRewal incorporated DeRewal Chemical Company, Inc.

EPA Remedy Selection

12. A contractor for EPA completed a Preliminary Assessment and Site Investigation of the Site between 1984 and January 1986. The reports of those tasks detailed the presence of a variety of contaminants, including organic compounds and inorganic compounds associated with documented releases at the Site.

13. EPA listed the Site on the National Priorities List on March 31, 1989. The listing was due primarily to elevated levels of organic contaminants and inorganic contaminants in groundwater. EPA conducted many response actions thereafter, including the removal of buried drums and contaminated soils and the draining and removal of tank trucks on the Site. The Army Corps of Engineers also constructed and began operating a groundwater extraction and treatment system, and EPA installed individual well treatment systems at sixteen area residents.

14. A contractor for EPA conducted a “Remedial Investigation” beginning on or about December 5, 1989, to determine if there were contaminants at the Site that pose a risk to human health and the environment.

15. After the investigation, the contractor prepared a “Remedial Investigation Report” for EPA dated January 1997.

16. The remedial investigation revealed that dozens of different hazardous substances, including metals and organic compounds, were present in soils, sediments, and groundwater at the Site.

17. A contractor for EPA conducted a “Feasibility Study” to define the objectives of the response action, to develop remedial action alternatives, and to undertake an initial screening and detailed analysis of the alternatives. The contractor prepared a “Feasibility Study Report” dated July 1997. Each alternative addressed both soil and groundwater.

18. EPA issued a Proposed Remedial Action Plan for comprehensive site clean-up based upon the conclusions of the Remedial Investigation/Feasibility Study in January 1998.

19. Following public notice and comment on the Proposed Remedial Action Plan, EPA issued the Record of Decision (“ROD”) on November 18, 1998.

20. The ROD lists “chemicals of potential concern” (“COPCs”) at the Site, including nine COPCs for surface soil, 53 COPCs for shallow groundwater, 4 COPCs for pond sediments, and 2 COPCs for pond surface water.

21. The ROD elected 7 major remedy components: soil aeration and treatment of VOC hot spots; excavation and offsite disposal of buried drums; groundwater extraction, metals precipitation, and air stripping to reduce concentrations of contaminants in the groundwater to below maximum contaminant levels; the installation of additional monitoring wells to monitor the effectiveness of the remedial action; institutional controls and monitoring to protect the integrity of the remedial action components to ensure continued protectiveness of the remedy; residential water treatment consisting of the continued maintenance of the granular activated carbon filters that were installed on residential wells in the downgradient areas to prevent potential exposure to contaminated groundwater from the Site; and phytoremediation consisting of the performance of treatability studies in the main former disposal areas of the Site to determine whether phytoremediation would be a viable treatment technique for groundwater.

22. EPA determined in the ROD that the selected remedy would be protective of human health and the environment by addressing contaminated soil hot spots, buried drums, contaminated groundwater, and offsite drinking water, and that it would be cost effective.

23. Subsequent to the issuance of the ROD, EPA determined to implement the remedial action described in the ROD in two operable units ("OUs"). EPA determined that, in general, OU-1 would address groundwater extraction, metal precipitation, and air stripping; the installation of additional monitoring wells, implementation of institutional controls and monitoring for OU-1; residential water treatment; and phytoremediation ("OU-1 RD/RA"). EPA determined that, in general, OU-2 would address: soil aeration and treatment of volatile organic compound hotspots; the excavation and off-site disposal of buried drums in contaminated soil; and implementation of institutional controls and monitoring for OU-2 ("OU-2 RD/RA").

Plaintiffs' Settlements with EPA and Conduct of Remediation

24. Cytec, Ford, and SPS are parties to an Administrative Order for Consent for remedial design, USEPA Docket No. III-2000-002-DC, entered in February 2000 and a Consent Decree entered by this Court on or about September 28, 2000. By entering into these two agreements, Cytec, Ford, and SPS agreed to do the work necessary to perform the OU-1 RD/RA, and to reimburse EPA for its administrative and oversight costs in the future in connection with the OU-1 RD/RA.

25. Cytec, Ford, SPS, TI Automotive, and Agere agreed to collectively fund and perform the OU-1 RD/RA, and entered into an agreement with two other entities, NRM Investment Company and Worthington Steel Company - Malvern (collectively the "OU-1 Group") whereby the parties to that agreement agreed to collectively fund and perform the OU-1 RD/RA and to otherwise comply with the OU-1 Consent Decree.

26. Each member of the OU-1 Group contributes (or has contributed) funds to OU-1 group trust accounts (the "OU-1 Trust Accounts").

27. Costs related to activities to perform the OU-1 RD/RA and for the Future Response Costs required by the OU-1 Consent Decree have been paid for and will be paid for in the future from the OU-1 trust accounts.

28. The OU-1 Group hired de maximis, inc. to be the "Supervising Contractor" as required by the 2000 Consent Decree. Geoffrey Seibel of de maximis, inc. is the project coordinator for the OU-1 Group. Mr. Seibel and de maximis, inc. later became the project coordinator for the OU-2 Group. Mr. Craig Coslett was approved by EPA as the

Assistant/Alternate Project Coordinator in 2001. de maximis, inc. provides overall project management of the Site remediation.

29. The OU-1 Group created a Technical Committee comprised of representatives of some of the OU-1 Group members. The Technical Committee supervises and directs the OU-1 work and reviews and approves payment of contractors that do the work. The Technical Committee works closely with de maximis to ensure that the work is completed in accordance with the project documents and EPA's direction and approvals. The Technical Committee later performed the same functions with respect to the OU-2 work.

30. de maximis, inc.'s work at the Site requires it to interact with EPA's remedial project manager for the Site and to seek approval of that work.

31. The OU-1 Group assumed responsibility for all future operation and maintenance of the groundwater extraction and treatment system on May 2, 2000.

32. The OU-1 Group retained Bigler Associates, Inc. to design and construct modification to the groundwater extraction and treatment system, as required under the ROD. The OU-1 Group submitted a Remedial Design Work Plan, 2001 and a Remedial Design Basis Report that described the removal of the shallow tray air stripper and the addition of an air sparge tank, metals precipitation unit, air phase carbon for off gas treatment, and liquid phase carbon. The work, conducted between January 2002 and May 2002, was documented in an August 20, 2004 Remedial Action Report to EPA. Each of those plans and reports, and the work referenced in those reports, was approved by EPA.

33. The OU-1 Group also retained Bigler Associates, Inc. to conduct the ongoing operation and maintenance of the treatment plant. Operation and maintenance is being conducted in accordance with the December 2001 Operation and Maintenance Plan. EPA approved that Plan.

34. Between July 2001 and August 2001, the OU-1 Group converted the groundwater extraction system from pneumatic to electric to improve the operation of the system and to decrease operation and maintenance cost. This modification was approved by EPA.

35. The OU-1 Group, after receiving and evaluating proposals from several engineering firms, retained Brown and Caldwell to perform the Remedial Design with respect to the balance of the OU-1 work. The OU-1 Group submitted to EPA the May 2000 Remedial Design Work Plan. EPA approved that document. Brown and Caldwell was also retained to provide supporting design services to Bigler Associates for the treatment plan upgrade.

36. The OU-1 Group has been maintaining the residential filter program, required by the ROD, since May 2000. The program is documented in the March 25, 2002 Residential Wells - Operation and Maintenance Plan. EPA approved that plan.

37. The OU-1 Group has since May 2000 conducted regular sampling and reporting of the monitoring well system. This work, required by the ROD, has been done in accordance with the March 2002 Final Long-Term Monitoring and Quality Assurance Plan. EPA approved that plan as well as a modification to the plan dated September 21, 2006. The Group and EPA work together to make modifications to the LTMP in response to data.

38. The OU-1 Group conducted an evaluation of the potential use of phytoremediation. The results are documented in the July 2000 Phytoremediation Study. Based on the results of the evaluation, EPA determined that phytoremediation would not effectively aid in groundwater cleanup and the treatability study required by the ROD was not necessary. EPA approved that study and agreed to defer its final determination on the applicability of phytoremediation until after the OU-2 work was complete. After completion of the OU-2, EPA confirmed that no additional work relative to phytoremediation was necessary.

39. In November 2000, EPA agreed to defer and combine the OU-1 Institutional Control requirements with the OU-2 Institutional Control requirements. The OU-1 and OU-2 Groups continue to work with the EPA on establishing appropriate Institutional Controls for the Site.

40. Cytec, Ford, SPS, and TI Automotive are signatories to an Administrative Order on Consent for Remedial Design, EPA Docket No. III-2001-0010-DC effective October 17, 2001 and a Consent Decree entered by this Court on March 14, 2002. By entering into these agreements, those entities agreed to do the work necessary to perform the OU-2 RD/RA at the Site, to reimburse EPA both for \$7,000,000 in response costs incurred and accounted for prior to July 2000, and for an as yet determined amount of response costs incurred subsequent to July 2000, and to reimburse EPA for its future response costs in connection with the OU-2 RD/RA.

41. Those four entities and Agere (the "OU-2 Group") agreed to collectively fund and perform the OU-2 RD/RA.

42. Those parties contributed funds to OU-2 Group trust accounts.

43. All costs of the activities to perform the OU-2 RD/RA and to perform the other requirements of the OU-2 Consent Decree have been paid for from the OU-2 trust accounts.

44. The OU-2 Group retained Brown and Caldwell to complete the remedial design of the OU-2 work, to perform construction quality assurance during the remedial action, and to be the "Supervising Contractor" as required by the 2001 Consent Decree.

45. The OU-2 Group after receiving and reviewing proposals from several remedial contractors, retained Code Environmental Inc. to do the construction of the OU-2 remedial action. EPA's contractor provided independent quality assurance oversight of the work.

46. The OU-2 Group submitted a February 2002 Remedial Design Work Plan, and a November, 2002 Remedial Design Report. Those reports were approved by EPA. The cleanup of contaminated soils and drum removal, required by the ROD, is documented in the May 28, 2004 Remedial Construction Report. EPA approved that report.

47. In addition to the reports and plans mentioned above, ongoing Site operation and maintenance activities are summarized in progress reports submitted to PADEP and EPA regularly since June 2000.

48. All remedial activities conducted at the Site by the OU-1 and OU-2 Groups were consistent with the 1998 ROD and subsequent design documents approved by EPA. Construction and monitoring activities were overseen by EPA and its contractors and verified as

conforming with the design documents approved by EPA. The QA/QC program was in conformance with EPA standards.

49. EPA and PADEP conducted a final inspection on September 23, 2003 and determined that the OU-1 and OU-2 Groups conducted the remedy in accordance with the design plans and specifications. The Site achieved construction completion status with the signing by EPA of a November 10, 2003 Preliminary Close-out Report.

50. EPA conducted a Five-Year Review from November 2006 through August 2007. It issued a Five-Year Review Report on August 22, 2007. EPA found therein that the remedy has been constructed in accordance with the requirements of the ROD and is functioning as designed and intended.

51. Mr. Seibel and Mr. Coslett review bills from remediation consultants and contractors and make recommendations to the OU-1 and OU-2 Groups regarding payment. They oversee the work reflected in those bills, which are for work performed in the investigation, remediation, monitoring and maintenance of the Site.

52. The bills are then forwarded by de maximis to two members of the Technical Committee. Those individuals review the bills and de maximis's recommendations and make a final determination regarding the payment of the invoices. If approved, they forward their payment recommendations to common counsel for payment

53. Timothy Bergere, Esquire, a lawyer at Montgomery, McCracken & Rhoads, has, since August 2003, been common counsel to the OU-1 and OU-2 Groups with respect to the work done at the Site by those groups.

54. Mr. Bergere reviews all payment recommendations and arranges for them to be paid from the OU-1 and OU-2 trust accounts. Mr. Berger also maintains the cash flow records of the groups. Mr. Bergere also maintains the OU-1 and OU-2 trust accounts.

55. All of the costs billed to the OU-1 and OU-2 Groups that de maximis reviewed and submitted were for work performed in the investigation and clean-up of the Site.

56. The payments made by the OU-1 Group for the OU-1 RD/RA for work performed through December 31, 2007, consist of the following amounts:

Agere	\$540,874.34
Cytec	\$846,674.74
Ford	\$841,152.85
SPS	\$841,152.85
TI	\$286,601.22
NRM	\$277,975.20
Worthington	\$277,275.80

57. The payments made by Plaintiffs for the OU-2 RD/RA are in the following amounts:

Agere	\$188,279.75
Cytec	\$530,565.73
Ford	\$521,953.31
SPS	\$521,953.31
TI	\$521,953.31

58. The payments made by the OU-1 Group for EPA's oversight costs for the OU-1 RD/RA are in the following amounts:

EPA Oversight Bill	Agere	Cytec	Ford	SPS	TI	NRM	Worthington
\$38993.30	\$7,798.66	\$7,798.66	\$7,798.66	\$7,798.66	\$2599.55	\$2599.55	\$2599.55
\$169,720.60	\$33,944.12	\$33,944.12	\$33,944.12	\$33,944.12	\$11,314.71	\$11,314.71	\$11,314.71
\$80,466.45	\$16,093.29	\$16,093.29	\$16,093.29	\$16,093.29	\$5,364.43	\$5,364.43	\$5,364.43

\$33,015.66	\$6,603.14	\$6,603.14	\$6,603.14	\$6,603.14	\$2,201.05	\$2,201.05	\$2,201.05
\$10,564.97		\$2,641.24	\$2,641.24	\$2,641.24	\$880.41	\$880.41	\$880.41

59. The payments made by Plaintiffs for EPA's oversight costs for the OU-2

RD/RA are in the following amounts:

EPA Oversight Bill	Agere	Cytec	Ford	SPS	TI
\$133,327.41	\$13,332.77	\$29,998.66	\$29,998.66	\$29,998.66	\$29,998.66
\$120,958.65	\$12,095.87	\$27,215.70	\$27,215.70	\$27,215.70	\$27,215.70
\$71,695.27		\$18,144.72	\$17,850.18	\$17,850.18	\$17,850.18

60. The payments made by Plaintiffs for EPA's past costs are in the following

amounts:

EPA Past Costs	Agere	Cytec	Ford	SPS	TI	NRM	Worthington
\$7,062,962.06		\$1,765,740.52	\$1,765,740.52	\$1,765,740.52	\$1,765,740.52		
\$415,652.74	\$83,130.55	\$83,130.55	\$83,130.55	\$83,130.55	\$27,710.81	\$27,710.81	\$27,710.81

61. Smiths Group PLC ("Smiths"), a United Kingdom corporation, was, prior to April 25, 2001, the ultimate parent of TI Automotive. On July 3, 2001, pursuant to an April 25, 2001 Transfer Agreement, Smiths sold the shares of TI Automotive (and other related companies) to 329th Shelf Investment Company Limited. Smiths agreed, as part of that transaction, to indemnify TI Automotive and 329th Shelf Investment Company Limited with respect to any liabilities arising as a result of or in connection with the Site.

62. TI Automotive is the successor by merger to Bundy Corporation. Bundy Corporation changed its name on or about November 1999 to TI Group Automotive Systems Corporation.

63. TI Group, PLC, a United Kingdom corporation, became the ultimate parent of TI Group Automotive Systems Corporation on or about 1987. In or about December,

2000 TI Group, PLC merged into Smiths Industries, PLC, a United Kingdom corporation, and the merged entity became Smiths Group, PLC.

64. On or about June 8, 2001, TI Group Automotive Systems L.L.C. was incorporated as a limited liability company in the State of Delaware. On or about June 25, 2001, TI Group Automotive Systems Corporation was merged into TI Group Automotive Systems L.L.C.

65. Smiths has, since July 3, 2001, caused its subsidiaries, Smiths Group Services Corp. and Smiths Group North America, Inc., to transfer funds into the OU-1 and OU-2 group trust accounts on behalf of TI Automotive and with respect to TI Automotive's obligations to the OU-1 and OU-2 groups, and with respect to the 2001 Consent Decree.

66. TI Automotive has agreed with Smiths that it will seek to recover in this action and to Smiths all sums paid by Smiths on TI Automotive's behalf.

67. A portion of the proceeds of the settlement between Plaintiffs and Techalloy were distributed to Cytec, Ford, SPS, and TI Automotive. TI Automotive's share of the proceeds of that settlement were forwarded by TI Automotive to Smiths Group Services Corporation. Specifically, on or about May 10, 2007, TI Automotive's portion of that settlement payment was distributed to TI Automotive by counsel for Plaintiffs. TI Automotive then paid those proceeds to Smith's designee, Smiths Group Services Corporation.

68. The proceeds of all earlier settlements between Plaintiffs and other settling defendants were held in a trust account of counsel for Plaintiffs and disbursed to pay invoices to

Plaintiffs for the fees and costs of this litigation that would have otherwise been paid by Smiths Group, PLC on behalf of TI.

69. Agere has to date paid approximately \$1,294,196.10 into OU-1 and OU-2 Trust Accounts and to counsel for Plaintiffs for legal fees for this action. On or about March 30, 2007, Agere entered into a settlement agreement with SPS, Ford, Cytec, and TI resolving certain claims, including the rights and obligations, as between Agere and those entities, for Agere's share of all OU-1 and OU-2 Group costs, including the costs of this action. SPS, Ford, Cytec, and TI agreed therein to pay Agere \$400,000, none of which was allocated by the parties to any previous contributions by Agere. Agere assigned its rights in this action to those parties.

70. The costs incurred by the OU-1 and OU-2 Groups were necessary to comply with the requirements of the ROD and were consistent with the National Contingency Plan.

71. EPA's initial response activities were motivated by the history of waste disposal and documented releases at the Site, bulk releases of ferric chloride, copper ammonium carbonate, ammonia, and sulfuric acid.

72. Listing of the Site on the NPL was caused by these documented releases and the potential threat to human health and the environment posed by the levels of organic and inorganic chemicals (including trichloroethene, 1,1,1-trichloroethane, zinc, chromium, and lead) in groundwater.

73. The baseline human health risk assessment in the RI/FS concluded that the risks associated with residential use of ground water at on-site and off-site locations (including

many existing residential wells) exceeded acceptable limits. Metals contributed substantially to these unacceptable risks.

74. Remedial action was necessary to address concentrations above standards for metals in soil and ground water.

75. All of the remedial alternatives that were considered protective of human health and the environment involved chemical precipitation of metals to meet the discharge limits.

76. When present at sufficiently high concentrations in certain environments, metals can hinder or prevent degradation of organic materials by inhibiting biological activity.

77. Acid wastes released to the environment increased the mobility of metals and the corrosivity of the subsurface materials, thus contributing to the need for and cost of the response activities taken at the Boarhead Farms Superfund Site.

78. The acidity of the acid wastes disposed of in bulk increased the acidity of the water in the subsurface, thus increasing the solubility and mobility of these metals.

79. The disposal of acids tended to mobilize metals at the Site.

80. The effects of bulk disposal of acid wastes persisted for months (if not longer) even after lime was applied, and those effects were observed at a considerable distance from the disposal location.

81. Neutralization of acids by interaction with the soil depletes the general buffering capacity of soil, resulting in a subsurface environment that is more susceptible to

significant changes in pH. This facilitates the migration of chemicals that are more soluble in either acidic or basic conditions.

82. Early releases of acid wastes facilitated the migration of contaminants released at later times.

83. Metal drums that were placed in soils that had been affected by earlier releases of acids would tend to corrode faster than drums placed in unaffected soils. Releases of acid that occurred after the drums were in place would also have increased the rate of corrosion.

84. Releases of acid to the subsurface environment tended to increase the rate at which the buried drums released their contents.

85. Over time, biodegradation of the organic compounds released at the Site would tend to reduce the levels of COPCs in the environment and the risks associated with them.

86. In addition to increasing the mobility of metals, releases of acid tended to increase the persistence of organic COPCs, thus increasing the need for and cost of remediation.

87. Disposal of all materials, including materials that are essentially inert, contributed to the environmental conditions that led to the response activities taken at the Boarhead Farms Superfund Site.

88. Even releases or burial of inert materials (if they occurred) would have affected soil moisture levels, soil structure and permeability, groundwater elevations and recharge rates, and other factors that can influence the fate and transport of the chemicals addressed by the response activities.

89. Even if their pH was nearly neutral, releases of large quantities of liquids would cause increased migration of materials in the subsurface. This would tend to reduce the concentrations of hazardous substances and spread them over a larger area.

90. The various wastes disposed of at the Boarhead Farms site interacted with other wastes and environmental media in a very complex manner to cause the environmental conditions that led to the response activities.

91. A wide variety of wastes were released in varying modes (bulk disposal, drum burial) at both known and unknown locations over a period of years into a complex environment.

92. All of the wastes disposed of at the Site contributed in some manner to the environmental conditions that led to the need for and the cost of the response activities at the Site.

93. Even releases or burial of inert materials would have affected soil moisture levels, soil structure and permeability, groundwater elevations and recharge rates, and other factors that can influence the fate and transport of the chemicals addressed by the response activities.

94. Because most metals are more soluble in acidic solutions, the acidity of these wastes increased the mobility of metals in the subsurface environment. Even corrosive waste solutions that did not contain metals promoted the degradation of buried drums and altered the subsurface environment in ways that increased the mobility and persistence of hazardous

chemicals. Such solutions also mobilized metals that were naturally present in the soils at the Site.

95. The early response activities to address the presence of buried drums (in particular, the emergency removal actions) were necessary because of the history of waste disposal (documented releases) at the Site. In light of this history, these actions would have been appropriate even if the buried drums had not contained or released hazardous substances.

96. Even near-neutral acidic wastes consume some of the buffering capacity of the soils; this facilitates the migration of many chemicals (e.g., metals) that are more soluble in acidic or basic conditions.

97. Pickle liquors released at the Site increased the acidity and the levels of metals in both soil and groundwater.

98. Solvents contained in wastes disposed of at the Boarhead Farms site contaminated the soil and groundwater.

99. The upper surface of the bedrock that underlies the Site (which is diabase, an intrusive volcanic rock) is weathered and moderately fractured. The depth to bedrock varies across the Site from less than five to more than ten feet.

100. The primary migration pathway for contaminants at the Site is through the shallow groundwater system that exists in and above the upper zone of the bedrock. Wastes released at the Site entered the subsurface environment and this shallow groundwater system as a result of natural processes (such as gravity-driven flow of liquids and infiltration of rainwater and snowmelt) and human activities (such as burial of drums and disposal in pits).

101. The need for remediation at the Site is driven by inorganic chemicals (especially metals) and organic chemicals (especially VOCs) in soil and groundwater.

102. Disposal of wastes at the Site released a wide variety of hazardous substances to the environment.

103. Once released, the mobility and persistence of each chemical in the subsurface environment are dependent on the characteristics of the chemical of interest and the characteristics of the environment into which that chemical has been released.

104. With respect to persistence, the organic compounds are degraded at various rates by chemical and biological processes, while the metals (which are elements) will not degrade at all.

105. With respect to mobility, some of the chemicals were released as liquid wastes or are easily dissolved in water; these chemicals are generally more mobile than those that were released as solids, do not dissolve readily, or tend to adhere to soil particles.

106. The physical, chemical, and biological characteristics of the subsurface environment may have a substantial influence on the mobility and persistence of a specific chemical. For example, most metals are considerably more soluble in acidic conditions, so any release of acidic materials would have promoted the migration of metals.

107. After release, all of the wastes with common characteristics had similar and cumulative effects on the geochemistry of the environment.

108. All corrosive wastes (both acidic and basic) tended to promote the degradation of metal drums and the release of their contents to the environment, and all of the acidic wastes increased the concentrations and mobility of the metals, which increased the cost and complexity of the groundwater extraction and treatment systems.

109. Even waste materials that may not have exhibited the characteristics of RCRA hazardous wastes contributed to the environmental conditions that led to the response activities.

110. Metals released to the environment as bulk wastes and drummed wastes contributed substantially to the need for and cost of the response activities taken at the Boarhead Farms Superfund Site.

Disposal of Waste at the Site by DCC

111. DCC used the Site for disposal of waste DCC picked up from its customers from 1972 through the end of DCC's waste disposal business in early 1977.

112. The Site was the only location from which DCC conducted its waste hauling and disposal business.

113. Bulk wastes were usually drained into seepage pits specially created for that purpose at the Site.

114. Drums were either buried full at the Site or simply dumped and the drum sold to a drum company.

115. DCC consistently used one primary disposal location for its customers' wastes at any given time.

116. From January 1, 1972 until the opening of DCC's Ontario Street operation on December 1, 1973 is the Pre-Ontario period. From December 1, 1973 to June 30, 1975, when the Ontario Street operation was shut down by the City of Philadelphia, is the Ontario period. From July 1, 1975 through the opening of DCC's operation in the Wissinoming Industrial Part in Philadelphia on June 1, 1976, is the Gap period. From June 1, 1976 through March 29, 1977, when several DCC employees were arrested is the Wissinoming period

117. Between 95% and 100% of all of the waste handled by DCC beginning in January of 1972 until the opening of DCC's Ontario Street operation in Philadelphia on December 1, 1973 (the "Pre-Ontario period") was disposed of at the Site.

118. The Site was the only location owned and operated by Fred DeRewal or one of his companies on January 1, 1972.

119. The Pennsylvania State Police reported on April 26, 1972 a complaint of dead fish, dead plant life, and foaming along the edges of the stream on property adjacent to the Site. The complaint alleged that the pollution was caused by dumping of acid into the stream from tank trucks at the Site.

120. The Bucks County Department of Health ("BCDOH") went to the Site on April 28, 1972 in response to the complaint.

121. BCDOH inspected the Site again on February 14, 1973 noting large tanks, an open trailer with barrels, rubber-lined tankers, and full barrels standing on the ground.

122. On March 5, 1973 BCDOH conducted a follow-up inspection pursuant to a search warrant, and observed liquid and solid waste spilled on the ground and runoff from

several locations carrying wastes to an unnamed tributary of the Delaware River. A lagoon was discovered approximately 10 feet square by two feet deep and containing an unknown liquid waste.

123. During the February and March 1973 inspections inspectors observed a flatbed truck with approximately 40 barrels of an unidentified solvent, and that an “active” industrial waste discharge was present.

124. A clean-up agreement between PADER (through the BCDOH), Boarhead Corporation and Manfred DeRewal was signed on March 21, 1973 in which it was agreed that all industrial waste would be removed from the Site and soil cleaned up by the end of that month. Boarhead Corporation additionally agreed that it would store no further hazardous substances or conduct any further landfill operations without PADER’s prior permission.

125. On October 31, 1973 a nearby resident had complained that a stream running through his property had been discolored and foamy for several days. An investigator responding to the neighbor’s complaint found pools of green liquid chemicals on the property and evidence of runoff of the liquid chemicals into a swamp on the property. BCDOH thereafter became actively involved taking enforcement action.

126. PADER issued a November 2, 1973 Order to Boarhead Corporation (“Abatement Order”) requiring cleanup of that pollution and steps to be taken to prevent further pollution.

127. BCDOH conducted ten inspections of the Site since October 31, 1973 and had discovered ample technical evidence to show the pollution and violations.

128. On or about November 5, 1973 BDCOH observed that lime had been spread in three spots in the “swamp” but that the majority of the swamp remained saturated with untreated waste.

129. On or about November 23, 1973 BCDOH observed that, though more lime had been spread in the swamp, puddles of waste in a large part of the swamp remained untreated.

130. As of January 8, 1974, Boarhead Corporation had not complied with the Abatement Order issued November 2, 1973.

131. Boarhead Corporation’s appeal of the Abatement Order was denied on January 16, 1974.

132. A Complaint in Equity was filed on May 31, 1974 in the Court of Common Pleas of Bucks County with an injunction issuing on June 21, 1974.

133. DCC continued to dispose of its customers’ wastes at the Site until approximately November of 1973.

134. Bruce DeRewal started driving a truck for DCC in approximately Fall of 1972, and did so for approximately six months. When he graduated from high school in June 1973, he stopped working for his father, then returned as a driver after the Ontario Street location had opened. He continued working for DCC until April, 1977.

135. The only disposal location Bruce DeRewal used during the Pre-Ontario period was the Site.

136. Jeff Shaak worked for DCC in two periods of time. He began working as a driver for DCC in the Fall of 1972 and continued until just before Ontario Street opened in December of 1973. He returned sometime after the Wissinoming location opened and worked through the end of the DCC period, thus from the summer of 1976 through April of 1977.

137. The only disposal location Mr. Shaak used during the Pre-Ontario period was the Site.

138. June Stephens began driving for DCC in the Pre-Ontario period, in the Fall of 1972. She worked for DCC into 1977, except for a few months.

139. The only disposal location Ms. Stephens used during the Pre-Ontario period was the Site.

140. John Bean was a part-time driver for DCC beginning approximately in the Fall of 1972 and continuing through sometime just prior to the demise of the DCC business. Mr. Bean's jobs were virtually all "fill in," typically on the weekends or evenings.

141. All of the waste John Bean hauled in any time period went to the Site.

142. John Barsum drove a truck for DCC from approximately late 1971 or early 1972 through the demise of DCC. Mr. Barsum owned his own tractor, and worked as a contract hauler. Mr. Barsum had by then been doing construction work for Fred DeRewal at the Site.

143. Mr. Barsum took every load of DCC customer waste to the Site for disposal until the heightened regulatory activity in late 1973 began. In late 1973, before Ontario

Street opened, he took approximately six loads of waste to Frenchtown and approximately three loads to Marvin Jonas's Sewell, New Jersey site. All other loads went to the Site.

144. Freddie DeRewal started driving for DCC when he obtained his drivers license on his sixteenth birthday (September of 1972) and then dropped out of school to drive for DCC. Other than a few months, he continued working for DCC through April 1977.

145. Virtually all of the DCC customer waste picked up by Freddie DeRewal before Ontario Street opened was disposed of at the Site. The only other disposal location he used during this period was Frenchtown, to which he took bulk waste a "very little."

146. Richie Minthorn is a deceased DCC driver. Mr. Minthorn started sometime after Mr. Cypecki started. He continued working for DCC until April 1977. He also worked as a dispatcher for DCC.

147. Mr. Minthorn disposed of the DCC customer wastes in the same locations as did the other DCC drivers in each time period.

148. Ed Cypecki is a DCC driver either dead or long disappeared. Mr. Cypecki started sometime after Mr. Barsum started driving a truck for DCC. He continued working for DCC through March, 1977. Mr. Cypecki used the name "Ed Long."

149. Mr. Cypecki disposed of the DCC customer wastes in the same locations as did the other DCC drivers in each time period.

150. This heightened enforcement activity at the end of 1973 led to the leasing by Fred DeRewal on November 15, 1973 of a one story building at 3013-31 East Ontario Street in Philadelphia.

151. Possession was permitted under the Lease on December 1, 1973.

152. At least 15% of all of the waste handled by DCC after the opening of DCC's Ontario Street operation on December 1, 1973 until the closing of Ontario Street on or before June 30, 1975 was disposed at the Site.

153. Ontario Street was a warehouse about two blocks from the Delaware River.

154. The Ontario Street lease is the only lease DCC or Fred DeRewal had for the facility.

155. DCC dumped wastes down the sewer at Ontario Street.

156. DCC stopped using the Ontario Street location when its polluting activities became known to the Philadelphia Water Department.

157. On September 24, 1974, the Water Department wrote to DeRewal about his "spent chromic acid transfer operations." The Water Department directed DeRewal to install a limestone interceptor at the facility and a two compartment oil inceptor necessary to prevent oil discharges to the city sewer system."

158. The Water Department again wrote to DeRewal and to his landlord on June 2, 1975. This letter noted various deficiencies in DCC's operation of the Ontario Street Site

and informed DCC that it planned to terminate both sewer and water services to the facility to end those operations.

159. The Water Department plugged the lateral connection between June 2, 1975 and June 13, 1975.

160. The Water Department severed and sealed the lateral on June 13, 1975.

161. DCC thereafter stopped using the Ontario Street location.

162. DCC also disposed of waste at the Site during the Ontario period.

163. The BCDOH observed on approximately April 25, 1974 at the Site that there was foaming in the swamp that was discharging to downstream waters. It is also noted that a large part of the swamp remained soaked with untreated waste and that there was a puddle of unknown orange substance near old tanks and trucks on the Site.

164. The Commonwealth of Pennsylvania filed a Complaint in equity on May 28, 1974 as a result, seeking a preliminary injunction against Boarhead Corporation and Manfred DeRewal requiring compliance with the March 21, 1973 Agreement with PADER.

165. This Complaint was resolved with an agreed order wherein the defendants were to retain a consultant acceptable to PADER who would submit a proposal for the immediate treatment of the waste materials at the Site and would thereafter submit three weekly sampling reports.

166. BCDOH found in approximately February 26, 1975 that the pollution problems at the Site had not been corrected, noted an overflowing collection pit, a parked flat

bed trailer containing barrels marked “acid,” and a parked trailer with damaged drums of dry chemicals.

167. There were four full-time DCC drivers and three part-time drivers during the Ontario Street period.

168. Ms. Stephens took all of the DCC customer wastes she hauled to the Site during this period except for two or three loads.

169. Mr. Bean took all of the DCC customer wastes he hauled to the Site during this period.

170. Bruce took waste either to Ontario Street or to the Site during the Ontario period. No other disposal locations were used by him in that time period.

171. The other DCC drivers occasionally took loads to the Site during this period.

172. There was a period of time of eleven months after Ontario Street was shut down when DCC did not have regular access to a disposal location it controlled except for the Site. At least 65% of all of the waste handled by DCC after the closing of DCC’s Ontario Street operation and until the opening of DCC’s Wissinoming operation on June 1, 1976 (the “Gap period”) was disposed at the Site.

173. BCDOH observed on approximately July 16, 1975 that a 4,000 gallon tanker leaking an unspecified liquid had entered the Site, though it appeared not to be leaking while parked on the Site.

174. On January 25, 1976 and February 18, 1976 BCDOH filed a total of nine criminal complaints against Boarhead Corporation and Manfred DeRewal alleging violations of the Pennsylvania Clean Streams Law.

175. Mr. DeRewal was found guilty of all nine criminal counts on March 29, 1976.

176. On approximately April 1, 1976 approximately 4,000 gallons of liquid ammonia were released at the Site from an open valve on a tanker.

177. There were four full-time DCC drivers and three part-time drivers during the Gap period.

178. After DCC was shut down at Ontario Street and before Wissinoming was acquired DCC drivers went either to the Site or to landfills.

179. Ms. Stephens took all of the DCC customer wastes she hauled to the Site during this period.

180. Mr. Bean took all of the DCC customer wastes he hauled to the Site during this period.

181. Freddie DeRewal took most of the DCC customer wastes he hauled to the Site during this period.

182. Bruce DeRewal did mostly mechanical work during this period.

183. Fred DeRewal formed a Pennsylvania corporation named Environmental Chemical Control ("ECC") on October 18, 1976.

184. ECC entered into a lease dated May 6, 1976 wherein the landlord was the Wissinoming Industrial Park and the leased premises were on Comly Street in Philadelphia. The term of the lease was June 1, 1976 to May 31, 1977. The initial leasehold was limited to the first floor building "R."

185. On November 1, 1976 an addendum to the lease was executed stating that effective that date additional space was leased in Building "G" and Building "Z" and approximately 1,400 square feet of yard space. The lease was to continue for its remaining six months and then for another year.

186. At least 15% of all of the waste handled by DCC after opening of DCC's Wissinoming operation on June 1, 1976 until March 29, 1977 (the "Wissinoming period") were disposed of at the Site, except that at least 25% of the wastes believed by the DCC drivers to consist of nitrating acids were disposed of at the Site during this period.

187. Wissinoming was a warehouse facility that included a sewer into which DCC customer wastes could be dumped.

188. DCC used Wissinoming until Fred DeRewal and others were arrested on March 29, 1977 for dumping waste directly into the Delaware River near that location.

189. A notice of violation was issued on April 5, 1977 and an agreement was entered into between DCC, ECC, EPA and the City of Philadelphia on May 12, 1977 for the disposal of two tank loads of material discovered at the Site.

190. Generally nitrating acids were not disposed of at Wissinoming because of the colored fumes that were created when such wastes were dumped.

191. Special pits were constructed at the Boarhead Site just to receive these nitrating acids.

192. More than half of the loads thought by DCC drivers to be nitrating acid were disposed of at the Site during the Wissinoming period.

193. Neither drummed wastes nor flammable solvents were taken to the Wissinoming facility.

194. On approximately July 9, 1976 there was a complaint to the local police department of ammonia odors on Lonely Cottage Road. Additional complaints of the same type were made on July 27th and July 28th.

195. On or about July 30, 1976 BCDOH observed eight barrels marked "scrap HCL" and a tanker full of ammonia on the Site.

196. The Bridgeton Police Department received another complaint of ammonia odor on September 8, 1976, and reference was made to a heavy fog created when liquid from a leaking tanker truck loaded with an unspecified amount of sulfuric acid hit the ground.

197. Fred DeRewal and Bruce DeRewal were burned and taken to the hospital as a result of this spill.

198. Bruce DeRewal worked primarily as a mechanic and at the Wissinoming location during this period, not as a driver.

199. Freddie DeRewal took at least half of the loads he thought were nitrating acids to the Site for disposal.

200. Jeff Shaak disposed of at least some loads of DCC customer wastes at the Site during this period.

201. Ms. Stephens took all of the DCC customer wastes she hauled to the Site during this period except for two or three loads.

202. Mr. Bean took all of the DCC customer wastes he hauled to the Site during this period.

203. There were five full-time DCC drivers and three part-time drivers during the Wissinoming Period.

Defendant Wastes

204. Carpenter Technology Corporation is a Delaware corporation with its principal place of business in Reading, Pennsylvania.

205. Carpenter arranged in 1969 and 1970 with Revere Chemical Corporation (“Revere”) to remove waste pickle liquor from its Reading facility.

206. David Mann was employed by Carpenter in its engineering department from June 24, 1968 to March 18, 1977.

207. John Adams was employed by Carpenter in its engineering department from November 1952 to January 1986.

208. Mr. Adams was Mr. Mann’s supervisor.

209. Mr. Mann and Mr. Adams were each involved in the decisions of Carpenter's purchasing department with respect to the purchase of disposal services for Carpenter's waste pickle liquors.

210. Carpenter (through Mr. Mann, Mr. Adams, and the purchasing department) knew that Fred DeRewal was associated with Revere.

211. Mr. Mann met Fred DeRewal at the Revere facility.

212. Mr. Adams learned in July 1969 from the regulatory authorities that Revere was in trouble because of subsurface pollution at the Revere site.

213. Mr. Mann learned in February 1970 that Revere had ended its operations in January 1970 because of pollution citations by the regulatory authorities. Mr. Mann informed Mr. Adams and two members of Carpenter's purchasing department of this.

214. Carpenter entered into a June 12, 1973 agreement with DCC in which DCC agreed to pick up and dispose of Carpenter's waste hydrochloric acid pickle liquor.

215. This new relationship arose out of a proposal from Fred DeRewal dated November of 1972.

216. Pursuant to that agreement, DCC hauled 916,114 bulk gallons of waste hydrochloric acid from Carpenter's Reading facility between June 20, 1973 and December 1, 1973.

217. 870,308 gallons of that waste were disposed of at the Site.

218. Pursuant to that agreement, DCC hauled 816,658 bulk gallons of waste hydrochloric acid from Carpenter's Reading facility between December 1, 1973 and June 1974.

219. 122,499 gallons of that waste were disposed of at the Site.

220. Carpenter's waste hydrochloric acid consisted of (by weight), among other compounds (by weight), hydrochloric acid (17%), hydrofluoric acid (0.2%), nitric acid (0.8%), sulfuric acid (0.9%), iron (3.4%), nickel (1.1%), chromium (0.5%), cobalt (0.05%), copper (0.02%), magnesium 0.007%, manganese (0.03%), phosphorus (less than 0.01%), titanium (0.003%), and vanadium (0.02%).

221. Freddie DeRewal picked up tank wagon loads of pickle liquor from Carpenter on dozens of occasions.

222. When he first picked up from Carpenter, Ontario had not yet opened and all of the waste pre-Ontario went to the Boarhead Site.

223. He dumped the Carpenter waste on the ground at the Site.

224. Bruce DeRewal picked up tank wagon loads of pickle liquor from Carpenter up to 5 times a day for months.

225. Carpenter was one of the first customers from which he picked up waste.

226. The only two places he took Carpenter waste were Ontario Street and the Site.

227. June Stephens picked up tank wagon loads of pickle liquor from Carpenter.

228. She took all of the loads she picked up to the Site.

229. John Barsum picked up dozens of tank wagon loads of pickle liquor from Carpenter.

230. Carpenter was one of the earliest DCC customers from which he picked up wastes.

231. He picked up waste from Carpenter before Ontario Street was opened.

232. Mr. Barsum took Carpenter waste to the Site for disposal.

233. Carpenter received a Section 104(e) Request from EPA with respect to the Site.

234. Carpenter received a Special Notice Letter from EPA dated September 28, 2000. The letter asked Carpenter to resolve its liability to the United States for the alleged past costs incurred, and to agree to do the work required by the ROD but not included in the 2000 Consent Decree.

235. Carpenter was asked to join Cytec, Ford, and SPS and others in agreeing to do the OU-1 work, but declined to do so.

236. Carpenter was invited to and attended a meeting on October 24, 2000 in which Carpenter was asked to participate in conducting the OU-2 work and in settling EPA's demand for past response costs. It declined to do so.

237. Advanced Environmental Technology Corp. ("AETC") was at all relevant times a New Jersey corporation with its principal place of business in Flanders, New Jersey.

238. AETC's business involved, at all relevant times, the transportation and disposal of hazardous waste.

239. The principals of AETC were Robert Landmesser and Robert Leuzarder.

240. AETC entered into an agreement in August 1976 with Ashland Inc. ("Ashland") in which AETC agreed to remove, transport, and dispose of Ashland's nitric/sulfuric acid waste, dye waste, phthalide acid waste, CDN waste, and solvent wastes from Ashland's Great Meadows, New Jersey facility.

241. AETC entered into an agreement on January 7, 1977 with Diaz Chemical Corporation ("Diaz") in which AETC agreed to remove, transport, and dispose of Diaz's nitric/sulfuric acid waste from Diaz's Holley, New York facility.

242. AETC contracted with Manfred DeRewal, through DCC or Environmental Chemical Control, to perform the removal, transportation, and disposal of the Ashland and Diaz wastes.

243. There was no contract between Ashland and DeRewal or between Diaz and DeRewal.

244. The Diaz and Ashland nitric/sulfuric acid wastes were difficult waste streams to dispose of because they were very concentrated, strong acids.

245. AETC sought out DeRewal to see whether he would be willing to haul and dispose of the Ashland and Diaz nitric/sulfuric acid wastes.

246. AETC did not do a background check on DeRewal either before or after contracting with him even though AETC was in regular contact with environmental regulators during this time period.

247. AETC represented to Mr. Curley that all materials handled by AETC would be processed or destroyed at approved sites under individual permit numbers.

248. AETC told Mr. Curley that DeRewal would be disposing of the Ashland wastes at Wissinoming.

249. However, AETC never specified with DeRewal where those wastes would actually be disposed of.

250. Nor did AETC ever verify where DeRewal was disposing of those wastes.

251. Mr. Curley sought to ensure that the Ashland wastes were being handled and disposed of properly. He insisted on meeting with Fred DeRewal and on inspecting the Wissinoming facility. AETC stalled Mr. Curley, and first arranged a meeting at the Site instead.

252. At that meeting in September 1976 at which Mr. Landmesser, Mr. Leuzarder, Mr. Curley, and Fred DeRewal were present, Fred DeRewal told the others that he intended to use the Site for the disposal of Ashland wastes. He also told them that the Pennsylvania environmental authorities did not think well of him and that he had formerly run afoul of environmental regulations.

253. Participants in the September 1976 meeting at the Site observed acid wagons at the Site.

254. Mr. Curley was warned during the Wissinoming Period by another waste hauling company that DCC was taking Ashland Chemical's wastes to a "farm in Pennsylvania."

255. Mr. Curley told Mr. Leuzarder prior to the meeting at the Site that a third party had told him that Ashland acid was being dumped at the Site.

256. Mr. Leuzarder told Mr. Curley that DCC trucks with waste in them sometimes stopped at the Site overnight en route to Wissinoming.

257. Mr. Curley continued to insist on visiting Wissinoming. AETC again stalled him. Mr. Curley and Mr. Leuzarder finally met with Fred DeRewal at Wissinoming on October 18, 1976.

258. Mr. Leuzarder was not qualified to assess the viability of the purported acid-neutralizing operation at Wissinoming.

259. Mr. Landmesser did not visit Wissinoming until 1977.

260. AETC never made an independent assessment of the viability of the purported acid-neutralizing operation at Wissinoming prior to entering into an agreement with DeRewal for disposal of Ashland and Diaz wastes.

261. Mr. Curley suspected that AETC had neither seen the Wissinoming operation prior to the October 18, 1976 meeting nor knew very much about DeRewal and his methods.

262. Mr. Curley concluded from that visit that the facility was not an ongoing chemical operation, and recommended to Ashland that a follow up with the City and the

Pennsylvania environmental authority should be done. Ashland nevertheless continued to do business with AETC, and never conducted the follow up.

263. AETC did nothing after the October 18, 1976 meeting at Wissinoming to confirm that DCC was in fact taking Ashland's wastes to Wissinoming.

264. On September 28, 1976 AETC proposed to Ashland that it "treat" Ashland's wastes at an acid distillation operation to be run by DeRewal, and referred to DeRewal as AETC's "associate company."

265. Fred DeRewal told Mr. Leuzarder and Mr. Landmesser that he was dumping Ashland's wastes at the Site.

266. In September, 1976, Mr. Leuzarder solicited Fred DeRewal to remove and dispose of waste from Roche. Mr. Leuzarder said he would tell Roche that DeRewal would take the waste to the G.R.O.W.S. landfill, a licensed facility, even though he knew DeRewal would not actually take it there.

267. Ashland stopped using AETC when it learned that DCC had been dumping waste into the Delaware River.

268. Loads of waste were removed from Ashland and Diaz as follows. Ashland and Diaz would inform AETC that they had a load of waste ready for transport and disposal. AETC would then inform DeRewal of this. When DeRewal employees entered the generators' sites, they were presented with a bill of lading indicating that the waste was "consigned" to AETC. The DeRewal employees then signed the bill of lading which, in the case of the Ashland bills, had AETC's name typed into the signature line.

269. Pursuant to the agreement between Ashland and AETC and the agreement between AETC and DeRewal, DeRewal hauled 216,650 bulk gallons of waste nitric/sulfuric acid from Ashland's Great Meadows facility between August 9, 1976 and March 30, 1977.

270. 54,163 gallons of that waste were disposed of at the Site.

271. Ashland's waste nitric/sulfuric acid consisted of, among other compounds, 83 % of sulfuric acid, 3 % nitric acid, 10 % water, and 3-4 % of organic material.

272. Pursuant to the agreement between Ashland and AETC and the agreement between AETC and DeRewal, DeRewal hauled 185,300 bulk gallons of dye waste from Ashland's Great Meadows facility between August 1976 and March 30, 1977.

273. 46,325 gallons of that waste were disposed of at the Site.

274. Ashland's dye waste consisted of, among other compounds, high concentrations of nitric and sulfuric acid and about 10-20 % of organic reagents, products, and by-products, including amines and aminophenols with nitrofluoroaniline, dimers and nitrophenols.

275. Pursuant to the agreement between Ashland and AETC and the agreement between AETC and DeRewal, DeRewal hauled 50,000 bulk gallons of phthalide acid waste from Ashland's Great Meadows facility between August 1976 and March 30, 1977.

276. 12,500 gallons of that waste were disposed of at the Site.

277. Ashland's phthalide waste consisted of, among other compounds, 1.5 % sulfuric acid, 32 % sodium sulfate, about 30 % organic by-products, and zinc and copper sulfate.

278. Pursuant to the agreement between Ashland and AETC and the agreement between AETC and DeRewal, DeRewal hauled 86,410 bulk gallons of CDN waste from Ashland's Great Meadows facility between August 1976 and March 30, 1977.

279. 21,603 gallons of that waste were disposed of at the Site.

280. Ashland's CDN waste consisted of, among other compounds, sodium sulfate, sodium nitrate, and less than about 0.3 % of the waste organic constituents found in the nitric acid waste.

281. Pursuant to the agreement between Ashland and AETC and the agreement between AETC and DeRewal, DeRewal hauled 12,950 bulk gallons of waste solvents from Ashland's Great Meadows facility between August 1976 and March 30, 1977.

282. 3,238 gallons of that waste were disposed of at the Site.

283. Ashland's solvent waste consisted of, among other compounds, isopropyl alcohol, methyl alcohol, benzene, toluene, xylene. Most of the solvent wastes contained a mixture of those chemicals.

284. Pursuant to the agreement between Ashland and AETC and the agreement between AETC and DeRewal, DeRewal hauled 4,325 drummed gallons of waste solvents from Ashland's Great Meadows facility between August 1976 and March 30, 1977.

285. 652 gallons of that waste were disposed of at the Site.

286. Ashland's solvent waste consisted of, among other compounds, diphylnacetonitrile (tar like), toluene residues (tar like), phenolic resins, CDN acid, and zinc oxide.

287. Freddie DeRewal hauled nitric/sulfuric acid, CDN waste water, dye waste, and phthalide waste from Ashland.

288. He did not know exactly what type of chemical waste he was picking up from the Ashland facility, but he assumed he was a mix of sulfuric and nitric acid.

289. Freddie DeRewal disposed of some of Ashland's wastes at the Site and some at Wissinoming.

290. John Barsum hauled nitric/sulfuric acid, CDN waste water, dye waste water, and phthalide waste water from Ashland.

291. He disposed of some of Ashland's wastes at the Site and some at Wissinoming.

292. Jeff Shaak hauled nitric/sulfuric acid, CDN waste water, dye waste water, and phthalide waste water from Ashland.

293. He disposed of some of Ashland's wastes at the Site and some at Wissinoming.

294. June Stephens hauled waste from Ashland.

295. Ed Cypecki hauled nitric/sulfuric acid, CDN waste water, dye waste water, phthalide waste water, and solvent wastes from Ashland.

296. Richie Minthorn hauled nitric/sulfuric acid, CDN waste water, dye waste water, phthalide waste water, and solvent wastes from Ashland.

297. Disposal of Ashland's and Diaz's nitric/sulfuric acid at Wissinoming created visible fumes.

298. DCC disposed of Ashland's solvent wastes in the same manner as any of Ashland's other waste.

299. Two intact drums and one drum fragment, each bearing an Ashland label, were excavated at the Site in 2003 as part of the OU-2 work.

300. One of the intact drums contained benzene, several other benzene compounds, phenols, methylene chloride, acetone, toluene, and toluene compounds.

301. Pursuant to the agreement between Diaz and AETC and the agreement between AETC and DeRewal, DeRewal hauled 173,100 bulk gallons of waste nitric/sulfuric acid from Diaz's Holley, New York facility between January 1977 and March 30, 1977.

302. 43,275 gallons of that waste were disposed of at the Site.

303. Diaz's waste nitric/sulfuric acid consisted of, among other compounds, 83 % of sulfuric acid, 3 % nitric acid, 10-12 % water, and 2-4 % of organic material.

304. Freddie DeRewal hauled tank loads of waste nitric/sulfuric acid from Diaz.

305. He believed the waste would create fumes when dumped.

306. He disposed of the majority of these loads at the Site, and the rest at Wissinoming.

307. Jeff Shaak hauled tank loads of waste nitric/sulfuric acid from Diaz.

308. He took some of the loads to the Site for disposal and some to Wissinoming.

309. June Stephens hauled tank loads of waste nitric/sulfuric acid from Diaz.

310. She took that waste to the Site for disposal.

311. John Barsum hauled tank loads of waste nitric/sulfuric acid from Diaz.

312. Ed Cypecki picked up waste from Diaz.

313. Richie Minthorn picked up waste from Diaz.

314. Ashland received a Section 104(e) Request from EPA with respect to the Site.

315. Ashland received a General Notice Letter from EPA dated May 18, 1989. The letter informed Ashland that EPA considered Ashland to be a potentially responsible party and asked Ashland to perform the RI/FS and potentially some removal actions at the Site.

316. AETC received a Section 104(e) Request from EPA with respect to the Site.

317. AETC received a General Notice Letter from EPA dated May 18, 1989. The letter informed AETC that EPA considered AETC to be a potentially responsible party and asked AETC to perform the RI/FS and potentially some removal actions at the Site.

318. AETC was asked to join Cytec, Ford, and SPS in agreeing to do the OU-1 work, but declined to do so.

319. AETC was invited to and attended a meeting on October 24, 2000 in which AETC was asked to participate in conducting the OU-2 work and in settling EPA's demand for past response costs. It declined to do so.

320. NRM Investment Company ("NRM") is a Pennsylvania Corporation with its principal place of business in Rosemont, Pennsylvania.

321. In May 1974 NRM purchased and thereafter operated a steel rolling mill facility in Malvern, Pennsylvania.

322. In May 1974 NRM contracted with Marvin Jonas for Jonas to remove, transport, and dispose of NRM's waste pickle liquor from NRM's Malvern, Pennsylvania facility.

323. Jonas then contracted with Manfred DeRewal, through DCC, to perform the removal, transportation, and disposal of the NRM waste.

324. Jonas billed NRM for that work.

325. In September, 1976 NRM contracted directly with DCC for DCC to remove, transport, and dispose of NRM's waste pickle liquor from NRM's Malvern, Pennsylvania facility.

326. Pursuant to the agreements between NRM and Jonas and Jonas and DCC, DCC hauled 589,500 bulk gallons of waste pickle liquor from NRM's Malvern, Pennsylvania facility between May 1, 1974 and July 30, 1975.

327. 88,425 gallons of that waste was disposed of at the Site.

328. Pursuant to the agreements between NRM and Jonas and Jonas and DCC, DCC hauled 765,000 bulk gallons of waste pickle liquor from NRM's Malvern, Pennsylvania facility between July 1, 1975 and June 1, 1976.

329. 765,500 gallons of that waste was disposed of at the Site.

330. Pursuant to the agreements between NRM and Jonas and Jonas and DCC, DCC hauled 184,500 bulk gallons of waste pickle liquor from NRM's Malvern, Pennsylvania facility between June 1, 1976 and September, 1976.

331. 27,675 gallons of that waste was disposed of at the Site.

332. Pursuant to the agreement between NRM and DCC, DCC hauled 247,500 bulk gallons of waste pickle liquor from NRM's Malvern, Pennsylvania facility between September, 1976 and March 30, 1977.

333. 37,125 gallons of that waste was disposed of at the Site.

334. NRM's waste pickle liquor consisted of, among other compounds, about 4% hydrochloric acid, 30% ferrous chloride, and trace amounts of chromium, zinc, nickel, copper, and cyanide.

335. Freddie DeRewal hauled waste from NRM dozens of times.

336. The first time he went to NRM Ontario Street was open.

337. During the Gap period Freddie DeRewal took many tanker loads of waste from NRM and disposed of them in pits at the Site.

338. June Stephens hauled waste from NRM.

339. She took all of those tanker loads of waste to the Site.

340. Jeff Shaak hauled tanker loads of waste from NRM after Wissinoming was open.

341. He took NRM waste to the Site for disposal.

342. Bruce DeRewal hauled tanker loads of waste from NRM.

343. John Barsum hauled tanker loads of waste from NRM.

344. NRM received a Section 104(e) Request from EPA with respect to the Site.

345. NRM received a General Notice Letter from EPA dated July 28, 1989. The letter informed NRM that EPA considered NRM to be a potentially responsible party and asked NRM to volunteer to perform the RI/FS and potentially some removal actions at the Site.

346. NRM was asked to join Cytec, Ford, and SPS in agreeing to do the OU-1 work, and agreed to do so.

347. NRM was asked to join Cytec, Ford, SPS, and TI in agreeing to do the OU-2 work and settle EPA's past costs claim, but declined to do so.

348. Handy & Harman Tube Company ("Handy") is a Delaware Corporation with its principal place of business in Norristown, Pennsylvania.

349. No later than February, 1973 Handy contracted with DCC for DCC to remove, transport, and dispose of waste solvents and waste lubricating oils from Handy's Norristown, Pennsylvania facility.

350. Bruce DeRewal hauled drummed solvent waste from Handy many times.

351. He picked up 20 drums on each trip.

352. He took some of the loads to the Site and some to Ontario Street for disposal.

353. Freddie DeRewal hauled tanker loads of waste spent acids from Handy.

354. He disposed of that waste at the Site.

355. John Barsum hauled 10-15 drums of solvent waste from Handy.

356. 8,550 bulk gallons of Handy spent acids were disposed of at the Site.

357. 4,285 drummed gallons of Handy solvents were disposed of at the Site.

358. Handy's solvent wastes consisted of, among other compounds, methyl ethyl ketone, acetone, and TCE.

359. Handy's waste spent acids consisted of, among other compounds, hydrochloric acid, sulfuric acid, nitric acid, hydrofluoric acid, nickel, chromium, and TCE.

360. Handy received a Section 104(e) Request from EPA with respect to the Site.

361. Handy was asked to join Cytec, Ford, and SPS in agreeing to do the OU-1 work, but declined to do so.

362. Handy received a Special Notice Letter from EPA dated September 28, 2000. The letter asked Handy to resolve its liability to the United States for the alleged past costs incurred, and to agree to do the work required by the ROD but not included in the 2000 Consent Decree.

363. Handy was invited to and attended a meeting on October 24, 2000 in which Handy was asked to participate in conducting the OU-2 work and in settling EPA's demand for past response costs. It declined to do so.

Settled Party Wastes

364. DCC hauled 187,504 bulk gallons of waste pickle liquor and waste pickle liquor rinse water from Techalloy's Rahns, Pennsylvania facility between October, 1972 and May 1, 1973.

365. DCC hauled 39,063 bulk gallons of waste pickle liquor from Techalloy's Rahns, Pennsylvania facility between May 1, 1973 and October 1, 1973.

366. On or about October 10, 1972 DCC hauled 2,500 gallons of drummed waste oil from Techalloy's Rahns, Pennsylvania facility.

367. DCC hauled 53,800 bulk gallons of nitric acid from Ciba-Geigy Corporation's Cranston, Rhode Island facility between July 1, 1976 and March 30, 1977.

368. DCC hauled 7,125 bulk gallons of nitric acid from Bostik South Inc.'s Greenville, South Carolina facility and disposed of it at the Site between June 1, 1976 and March 30, 1977.

369. On or about April 30, 1972, DCC hauled 3,465 drummed gallons of etchant from Sperry Corporation's Utica, New York facility.

370. DCC hauled 3,025 gallons of waste in plastic drums from Simon Wrecking Company's Williamsport, Pennsylvania facility and disposed of it at the Site.

371. DCC hauled 281 gallons of waste in small drums and carboys from the Navy's Willow Grove AFB and disposed of it at the Site.

372. DCC hauled 525 drummed gallons of etchant from Quickline's Cherry Hill, New Jersey facility between January 1, 1972 and December 1, 1973.

373. DCC hauled 2,261 drummed gallons of etchant from Quickline's Cherry Hill, New Jersey facility between December 1, 1973 and June 30, 1975.

374. DCC hauled 10,604 gallons of bulk pickle liquor from Plymouth Tube's Horsham, Pennsylvania facility between January 1, 1972 and December 1, 1973.

375. DCC hauled 11,667 gallons of bulk pickle liquor from Plymouth Tube's Horsham, Pennsylvania facility between December 1, 1973 and June 30, 1975.

376. DCC hauled 4,465 gallons of bulk pickle liquor from Plymouth Tube's Horsham, Pennsylvania facility between July 1, 1975 and June 1, 1976.

377. DCC hauled 1,165 gallons of bulk pickle liquor from Plymouth Tube's Horsham, Pennsylvania facility between June 1, 1976 and November 31, 1976.

378. DCC hauled 96,951 gallons of bulk etchant from fcg's Warrington, Pennsylvania facility between December 1, 1973 and June 30, 1975.

379. DCC hauled 15,792 gallons of bulk etchant from fcg's Warrington, Pennsylvania facility between July 1, 1975 and June 1, 1976.

380. DCC hauled 8,458 gallons of bulk etchant from fcg's Warrington, Pennsylvania facility between June 1, 1976 and November 31, 1976.

381. DCC hauled 33,798 gallons of drummed etchant from fcg's Warrington, Pennsylvania facility between January 1, 1972 and December, 1973.

382. DCC hauled 3,105 gallons of drummed etchant from fcg's Warrington, Pennsylvania facility between December 1, 1973 and June 30, 1975.

383. DCC hauled 16,905 gallons of drummed etchant from Etched Circuits's Cherry Hill, New Jersey facility between January 1, 1972 and December, 1973.

384. DCC hauled 23,213 gallons of drummed etchant from Etched Circuits's Cherry Hill, New Jersey facility between December 1, 1973 and June 30, 1975.

385. DCC hauled 13,885 gallons of drummed etchant from Etched Circuits's Cherry Hill, New Jersey facility between July 1, 1975 and June 1, 1976.

386. DCC hauled 14,268 gallons of drummed etchant from Etched Circuits's Cherry Hill, New Jersey facility between June 1, 1976 and March 30, 1977.

Plaintiff Wastes

387. DCC hauled 429 55 gallon drums of waste finishing materials from Ford's Watertown, Pennsylvania facility between March, 1972 and October, 1973.

388. DCC hauled 32 55 gallon drums of industrial waste solution from Ford's Wissahocken, Pennsylvania facility in July 1972.

389. DCC hauled 247 55 gallon drums of plastics from Ford's Watertown, Pennsylvania facility in April 1973.

390. DCC hauled 193,000 bulk gallons of ammonia waste water from American Cyanamid's Bound Brook, New Jersey facility between January 1, 1974 and December 31, 1974.

391. DCC hauled 116,000 bulk gallons of ammonia waste water from American Cyanamid's Bound Brook, New Jersey facility between June 1, 1976 and September, 1976.

392. DCC hauled 7,838 drummed gallons of chromic acid from SPS's Jenkintown, Pennsylvania facility between January 2, 1972 and November 2, 1973.

393. DCC hauled 12,155 drummed gallons of chromic acid from SPS's Jenkintown, Pennsylvania facility between December 1, 1973 and June 30, 1975.

394. DCC hauled 6,270 drummed gallons of chromic acid from SPS's Jenkintown, Pennsylvania facility between July 1, 1975 and May 25, 1976.

395. DCC hauled 5,858 drummed gallons of chromic acid from SPS's Jenkintown, Pennsylvania facility between June 1, 1976 and February 1977.

396. DCC hauled 8,388 drummed gallons of cyanide waste from SPS's Jenkintown, Pennsylvania facility between January 1, 1972 and November 2, 1973.

397. DCC hauled 12,320 drummed gallons of cyanide waste from SPS's Jenkintown, Pennsylvania facility between December 1, 1973 and June 30, 1975.

398. DCC hauled 6,270 drummed gallons of cyanide waste from SPS's Jenkintown, Pennsylvania facility between July 1, 1975 and May 25, 1976.

399. DCC hauled 6,573 drummed gallons of cyanide waste from SPS's Jenkintown, Pennsylvania facility between August 4, 1976 and February 24, 1977.

400. DCC hauled 990 drummed gallons of degreasing fluids from SPS's Jenkintown, Pennsylvania facility on June 6, 1973.

401. DCC hauled 165 drummed gallons of acetone waste from SPS's Jenkintown, Pennsylvania facility on June 6, 1973.

402. DCC hauled 110 drummed gallons of nickel waste from SPS's Jenkintown, Pennsylvania facility on June 6, 1973.

403. DCC hauled 4,500 bulk gallons of cyanide waste from SPS's Jenkintown, Pennsylvania facility between January 1, 1972 and December 1, 1973.

404. No waste from any facility operated by an Agere predecessor was disposed of at the Site.

405. No waste from Bundy's Malvern, Pennsylvania facility was disposed of at the Site.

Orphaned Parties

406. Manfred T. DeRewal, Sr. has no assets which are available and would allow him to participate financially in the cleanup of the Site.

407. Boarhead Corporation has no assets which are available and would allow it to participate financially in the cleanup of the Site.

408. DeRewal Chemical Company has no assets which are available and would allow it to participate financially in the cleanup of the Site.

409. Environmental Chemical Control, Inc. has no assets which are available and would allow it to participate financially in the cleanup of the Site.

410. Diaz Chemical Corporation has no assets which are available and would allow it to participate financially in the cleanup of the Site.

411. Drake Chemicals, Inc. has no assets which are available and would allow it to participate financially in the cleanup of the Site.

412. Enviratec, Inc. has no assets which are available and would allow it to participate financially in the cleanup of the Site.

413. Globe Disposal Co., Inc. has no assets which are available and would allow it to participate financially in the cleanup of the Site.

414. Haven Chemical, Inc. and Haven Industries, Inc. have no assets which are available and would allow those entities to participate financially in the cleanup of the Site.

415. Merit Metal Products Corporation has no assets which are available and would allow it to participate financially in the cleanup of the Site.

416. Sitkin Smelting & Refining, Inc. has no assets which are available and would allow it to participate financially in the cleanup of the Site.

417. Trace International, Inc., successor to Art Metal-Knoll Corporation, has no assets which are available and would allow it to participate financially in the cleanup of the Site.